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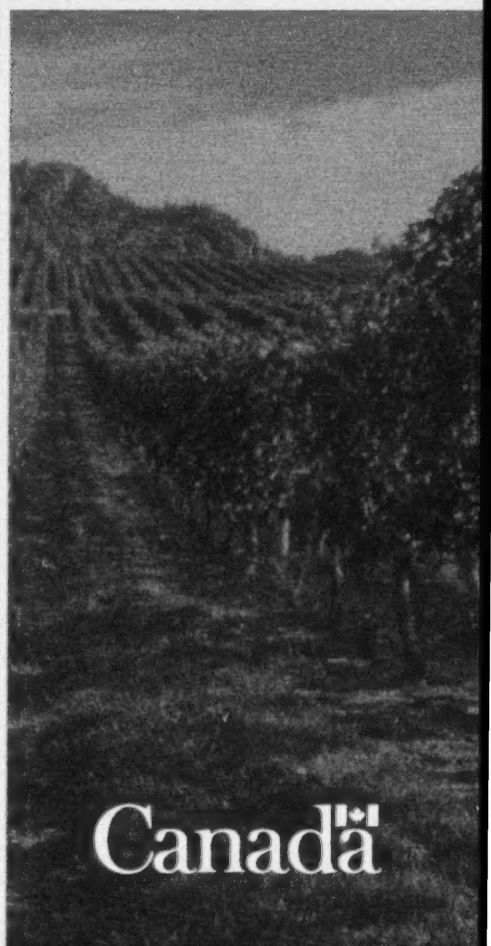
Santé
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**Pest Management
Regulatory Agency**

Annual Report 2011–2012



Canada

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Executive Summary

The Health Canada Pest Management Regulatory Agency (PMRA) is pleased to present the 2011-2012 Annual Report to Parliament, which details the PMRA's accomplishments and activities over the past fiscal year. The PMRA continues to move towards increasing collaboration with international partners to create efficiencies, and to ensure that Canadians have access to the most modern and efficient pest control products while upholding Canada's rigorous health and environmental standards. In 2011-2012, the PMRA registered 15 new active ingredients, resulting in the registration of 30 new end-use products. As of 31 March, 2012, 15 new active ingredients were under joint review with other jurisdictions. Several new scientific approaches were initiated to improve health and environmental protection and reduce barriers to trade, and new approaches and guidelines were implemented to improve the pesticide registration process. Re-evaluation of older products on a 15-year cycle continued, with 10 re-evaluations completed and 9 initiated this fiscal year. The PMRA continued to enforce compliance with pesticide regulations, and to reach out to stakeholders and the public to increase awareness of pest issues and responsible use of pesticides.

Vision, Mission and About the PMRA

Vision

Continually promoting the highest standards for the protection of health and the environment, based on modern science, Health Canada has been an international force in the regulation of pesticides resulting in public confidence and improved access to safer and innovative pesticides for Canadians. The PMRA has invested in its workforce, workplace and partnerships to support one of the best pesticide regulatory systems in the world.

Mission

Protecting the health and the environment of Canadians and supporting Canadian competitiveness by regulating pesticides and their use in an effective and transparent manner.

About the PMRA

The PMRA is a branch of Health Canada and is responsible for regulating pest control products under the federal authority of the Pest Control Products Act. Our mandate is to prevent unacceptable risks to people and the environment from the use of these products. We also encourage the development and application of sustainable pest management strategies and facilitate access to lower risk pest control products. We use modern scientific assessment techniques to assess human and environmental health risks when evaluating and re-evaluating pest control products. The PMRA endeavours to address public and stakeholder concerns, as well as to develop mechanisms to facilitate access to new innovative products.

Core Regulatory Activities: Protecting Canada, Protecting Canadians

Before a pesticide can be sold in Canada, pesticide registrants are required to provide the PMRA with large volumes of data to show that their product does not pose unacceptable risks to health and the environment and that the product has value. These data are rigorously reviewed by PMRA scientists to determine whether a product is acceptable for registration in Canada. Developing a pesticide for use in the global marketplace can take several years and can cost manufacturers millions of dollars.

The PMRA's science-based risk assessment includes the following:

- a health assessment that considers the potential for a pesticide to cause adverse health effects such as cancer, birth defects and endocrine disruption;
- an examination of all sources and routes (oral, dermal, inhalation) of potential exposure to a given pesticide, including exposure through diet, from drinking water and from contact with treated areas like lawns and gardens;
- an estimation of the amount of pesticides that people, including children, may come in contact with, both during and after a pesticide application;
- a human health risk assessment that determines the toxicity in relation to the amount of exposure in all potentially exposed special populations, including children;
- an environmental risk assessment that considers risks to plants, birds, mammals, beneficial insects, aquatic organisms as well as fate in the environment; and
- a value assessment that considers the contribution of the product to pest management, as well as its health, safety and environmental benefits, and social and economic impact.

Science is continually evolving, and pesticide regulation is becoming an increasingly global activity. The PMRA responds to these changes by changing scientific evaluation methods to meet the most modern standards, adapting regulations and registration processes to accommodate new pest management approaches, and playing a leading role in the development and execution of international regulatory cooperation.

New Registrations

Products that meet the PMRA's rigorous health and environmental standards, and are proven to have value, are registered for use in Canada under the conditions stated on the label. There are different types of registered products, including agricultural (food and non-food), industrial and domestic products, and products that can only be applied by licensed professionals. The PMRA is shifting towards conducting more product reviews in collaboration with other countries. This creates efficiencies in product evaluations, and increases access to important innovative products that might not otherwise be registered in Canada.

New Active Ingredients Registered in 2011–2012

In 2011–2012, 15 new active ingredients were registered for use in Canada, resulting in the registration of 30 new end-use products. Of the 15 new active ingredients, 8 were biopesticides, 6 were conventional pesticides and 1 was an antimicrobial. Please see Appendix Table 4 for a full list of new active ingredients registered, and their uses.

Joint Reviews

As of 31 March 2012, 15 new active ingredients were under joint review (including 8 conventional chemicals under Global Joint Review). In addition, there were 8 new proposals for the global joint review of new conventional chemical active ingredients pending applications for registration from industry.

Minor Uses

PMRA regularly meets with growers and grower associations to encourage participation in a collaborative process to identify priorities for new minor uses in Canada. The Canada-U.S. Grower Priority Database is a tool to support grower-requested priority reviews in both countries. In 2011-2012, 126 minor use label expansion submissions were completed. This yielded 404 new minor use registrations for a wide range of commodity sectors (288 food uses and 116 non-food uses) across Canada. As of 31 March 2012, 22 active joint minor use submissions and 4 active workshares were under review. Additional minor use registrations result from the registration of new active ingredients.

Emergency Registrations

A pest control product can be registered for up to one year for the emergency control of pest infestations for which no other effective method of control exists. The product must be effective, and the human health and environmental risks must be acceptable.

Emergency registrations are not intended as a solution to an ongoing pest-management problem. However, they may be reconsidered if the emergency situation exists in subsequent years and

there is evidence that users and the sponsoring agencies are actively working towards satisfying the data requirements for registration.

The number of emergency requests that the PMRA receives can vary from year to year, depending on pest outbreaks and the availability of alternative products and methods. In the 2011–2012 fiscal year, the PMRA granted 28 emergency registrations, of which 9 were new requests.

Registration Process Improvements

The PMRA is continually seeking ways to make the management of pesticide submissions more efficient, effective, and predictable for applicants/registrants and the PMRA. The objectives of these efforts have been twofold:

- to focus on allocating resources to areas of emerging need; and
- to adjust existing approaches and processes to ensure maximum efficiencies while continuing to protect the health and environment of Canadians.

The PMRA developed a regulatory proposal to reduce the regulatory burden on stakeholders by providing a more flexible approach to fulfill the value requirements for registration of pest control products. This new approach aims to facilitate access to new and effective crop protection tools and technologies and supports the objectives of the federal Agricultural Regulatory Action Plan and the Growing Forward Agricultural Policy Framework.

Registration processes for nonconventional products were further refined under the finalized Regulatory Directive: *Guidelines for the Registration of Non-Conventional Pest Control Products* (published in February 2012). The PMRA also continued to identify opportunities for improvements to label review/verification processes. Efficiencies in this area will be supported by new and revised guidance documents. Four guidance documents in the Label Process Series were finalized in June 2011:

- Guidance for Designing Peel-Back and Multi-Component Labels of Domestic Class Pest Control Products
- Designing Marketplace Labels of Domestic Class Pest Control Products
- Guidance to Improve Statements on Labels of Domestic Class Pest Control Products
- Pesticide Labelling Framework

Progress was also made on other changes that will continue to lead to a closer alignment of registration processes with approaches used by regulatory authorities in other jurisdictions. This included work on the Notification Process, Statement of Product Specifications Form and Data Code Tables. This work will facilitate work-share and joint review of applications with other jurisdictions.

All of these registration process improvements will be supported through improvements to PMRA's website and electronic regulatory system. Introduction of further automations to the

electronic submission process for applicants resulted in efficiencies with respect to the production of document lists and numbers as well as cross-reference lists. The PMRA also initiated work on a suite of online interactive tools that will assist applicants/registrants to prepare high quality application packages for submission. The first of these tools, the On-line Decision Tree was published on the PMRA website. Work on other tools including Video Tutorials, smart forms and online electronic “wizards” to assist applicants in the completion of required regulatory forms remains ongoing.

International Regulatory Cooperation

During 2011-2012, the PMRA led or participated in various initiatives with respect to International Regulatory Co-operation. PMRA and the Australian Pesticides and Veterinary Medicines Authority co-chaired the *First International Conference for Heads of Pesticide Regulatory Authorities* in Ottawa in September 2011. The conference provided the opportunity for the pesticide regulatory community to engage in long-term thinking about themes of common interest and led to the identification of areas for increased collaboration for a more effective international approach.

Under the Canada—United States Regulatory Cooperation Council Joint Action Plan, the PMRA has undertaken work aimed to facilitate equal access to pest control products and uses in both countries. Canada and the United States have long-standing history of regulatory cooperation in the area of pesticide regulation, and our respective regulatory requirements and approval processes are already highly aligned. Further convergence could promote greater work-sharing and information-sharing between US and Canadian regulators, facilitating more simultaneous access for producers to effective production tools and technologies while maintaining our high standards for protection of human health and the environment.

Scientific Developments

The PMRA is collaborating on an ongoing basis with other government departments, Canadian provinces, the US EPA, and through NAFTA and OECD working groups on several initiatives including:

- the development of strategic risk assessment and management approaches for pollinators;
- improving the Ecological Crosswalk Tool, which will facilitate use of environmental field studies and will decrease regulatory burdens for both regulators and industry;
- development and implementation of effective policies and approaches to the protection of non-target habitats;
- collaborated with OECD on development of the Extended One-Generation Reproductive Toxicity Study guideline;
- development and implementation of risk assessment/management approaches for PBT (persistent, bioaccumulative, toxic) chemicals;
- further alignment of pest control products approvals and establishment of tolerances and maximum residue limits (MRLs) for major and minor uses of pesticides to minimise trade barriers of pesticide-treated commodities between global partners;
- collection and analysis of data on pesticide levels in Canadian groundwater.

Re-evaluation Program

Under the *Pest Control Products Act*, pesticides are required to undergo a re-evaluation every 15 years. This ensures that registered pesticides meet the most modern health and environmental standards.

During fiscal year 2011–2012, ten re-evaluations were completed resulting in improved product use conditions that further protect human health and the environment. Nine new re-evaluations were initiated in 2011–2012. In addition, one special review was initiated for sodium monofluoroacetate (compound 1080) which is an animal toxicant used to control wolves and coyotes in the provinces of Alberta and Saskatchewan. The special review will evaluate the potential exposure to non-target animals in the environment when baits treated with this pesticide are used.

As part of the overall risk-reduction strategy for rodenticides in Canada, additional mitigation measures were required to reduce exposure of children, pets and non-target animals to several rodenticides. During this fiscal year the PMRA worked closely with stakeholders, including registrants, provincial governments and users, to implement the requirements. As a result, manufacturers must have their revised product labels and packaging (if applicable) approved for production in 2013. All domestic rodenticide products will be packaged with ready-to-use and tamper proof bait stations. In order to increase public awareness on the safe use of rodenticides, outreach materials were developed that include a Health Canada media advisory, a YouTube video and Questions and Answers documents.

As of 31 March 2012, 383 (or 96%) of the 401 pesticides from the first round of the re-evaluation program have now been addressed. Among these pesticides, 106 have been discontinued; 13 have been phased-out or are proposed for phase-out; 246 have been accepted with improved use conditions that further protect human health and the environment; and 18 have been accepted without any modifications to the conditions of use.

Incident Reporting Program

The Incident Reporting Program collects pesticide incident information in order to identify potential health or environmental risks related to pesticide use and exposure. In the 2011–2012 fiscal year, 1528 incident reports were filed, 1075 of which occurred in Canada. Details of these reports can be found on the PMRA website. The majority of incidents received did not require regulatory action, although some incidents were considered in the re-evaluation process. There were three cases where action was taken by the PMRA as a result of an identified risk. One was a label amendment which strengthened storage requirements of products containing strychnine, after a child had ingested such a product. The second related to the modification to the packaging of a personal insect repellent product due to leaking containers. Finally, following a review of several incidents, the production process at a pesticide manufacturing site was upgraded in order to reduce exposure to workers.

Chemicals Management Plan

Under the Government of Canada's Chemicals Management Plan (CMP), the PMRA continues to collaborate with other government departments in the evaluation and risk management of chemical substances in Canada. For more information, please consult the Chemicals Management Plan webpage: www.chemicalsubstanceschimiques.gc.ca/plan/index_e.html.

National Compliance Program

Compliance activities, conducted in collaboration with federal and provincial partners, include compliance promotion and monitoring inspection programs. These activities are an important mechanism for post-registration pesticide-risk reduction. When violations of the *Pest Control Products Act* (PCPA) occur, appropriate enforcement measures are taken.

In 2011-2012, PMRA delivered 37 compliance programs targeting users, distributors, registrants, manufacturers and formulators. Approximately 850 inspections were conducted to verify compliance with the Act. Most of these inspections detected high levels of compliance. Situations of non-compliance were reviewed, resulting in applicable enforcement actions. Forty-three independent surveillance inspections were conducted, targeting high risk violators to follow up on previous non-compliance; 84% of these violators returned to full compliance. Three hundred fifty samples were collected for laboratory analyses.

In 2011-2012, 1628 enforcement responses were carried out by regional pesticide compliance teams, aimed at correcting non-compliance within the regulated community. Product enforcement responses included label modifications, denial of entry at the border, seizure and detention, and compliance orders/requests to recall, return and/or dispose of the product to restore compliance. Enforcement actions taken against violators included education, enforcement letters/orders, and Administrative Monetary Penalties (AMPs). No prosecutions were pursued. A total of \$80.8K in AMP fines were issued.

Health Canada, in conjunction with Environment Canada and the province of New Brunswick, inspected fish farms to determine if they were complying with the regulations pertaining to use of sea lice control products. Two companies were found in violation and 16 Notices of Violation were issued under the *Agriculture and Agri-Food Administrative Monetary Penalties Act*. Health Canada regional staff supported Environment Canada as they investigated lobster kills in the Bay of Fundy, New Brunswick. Environment Canada subsequently issued several indictable charges under the *Fisheries Act* to one aquaculture company involving the illegal use of the pesticide cypermethrin in a marine environment.

In September 2011, the PMRA signed a collaborative agreement with the Canada Border Services Agency (CBSA) that will permit PMRA to collect import data on pesticides, which will be used to help identify and characterize illegal importations, and prevent their entry into Canada.

Food and Consumer Safety Action Plan (FCSAP)

In 2008, the PMRA embarked on a five-year initiative that focused on risk-reduction measures through the Canada Food and Consumer Safety Action Plan. The goals of this initiative are to engage industry in taking broader responsibility for consumer pesticide safety and to establish public confidence in consumer pesticide products. Under the Plan and during the 2011–2012 fiscal year, PMRA conducted a total of twelve active prevention and inspection activities for several sectors, including flea and tick spot-on products, pool and spa, rental properties, vendors, and seasonal worker programs.

Two Health Canada Advisories were developed for unregistered consumer pesticides: one related to a highly toxic “Miraculous Insecticide Chalk” containing deltamethrin imported from China; and the other related to the import of an ant bait product containing Mirex. Mirex is classified as a persistent organic pollutant and is prohibited by many countries, including Canada; and is subject to international treaties. Working with our US counterparts, we contacted over 500 Canadian customers of this product by mail to warn them of the danger, how to properly dispose of the product and to inform them to use only registered pest control products. In addition, the PMRA collaborated with provincial partners in Quebec to provide information awareness sessions for 110 representatives of 60 pest control operators (PCOs), and with the provincial counterparts in British Columbia to manage spray drift issues.

Outreach Activities

PMRA’s outreach unit has three main functions: to develop and distribute material to professional and consumer audiences on all aspects of responsible pesticide use; manage a 1-800 information line and e-mail service to respond to enquiries on pesticides and pest management; and provide support and advice for regional office participation at fairs, exhibits and other opportunities through the use of displays, didactic tools and printed material. Working closely with the scientific teams, the Outreach team ensures that produced material responds to current and emerging needs. Of particular note this past year, we translated our high-demand content on bedbugs, and material on reporting pesticide incidents, into seven non-official languages. We continued to develop content on seasonally-relevant topics to increase awareness of the proper use of pesticides, including articles for national media on preventing fleas and ticks on pets, and proper handling of domestic class rodenticides. This resulted in a total of 446 published articles in newspapers, community papers, magazines and national websites across the country. The Pest Management Information Service responded to over 2,200 calls and e-mails from the public on a broad range of questions relevant to pest management and responsible pesticide use. Our presence at fairs and exhibitions was expanded and regional offices were supplied with exhibit material designed to engage the public in discussion about consumer pesticide products, and more specialized audiences such as agricultural workers, landscapers, and veterinarians and pet care specialists.

Financial Profile

A-base	\$34.1M
Revenue	\$7M
Growing Forward	\$3.7M
CMP	\$5.0M
Total	\$49.8M

The PMRA received \$3.7M through the Growing Forward initiative to support the registration of minor use products. As a result, newer, more environmentally sustainable, and more modern products have been made available to Canadian producers, which helps sustain Canada's competitive position globally.

Through Canada's Chemicals Management Plan, the PMRA is receiving \$25M for fiscal years 2011–2012 to 2015–2016 to accelerate the re-evaluation of older pesticides, strengthen current regulatory activities for registration of new pesticides, facilitate access to new and safer pesticide products and improve risk-management approaches through Incident Reporting and Sales Reporting regulations.

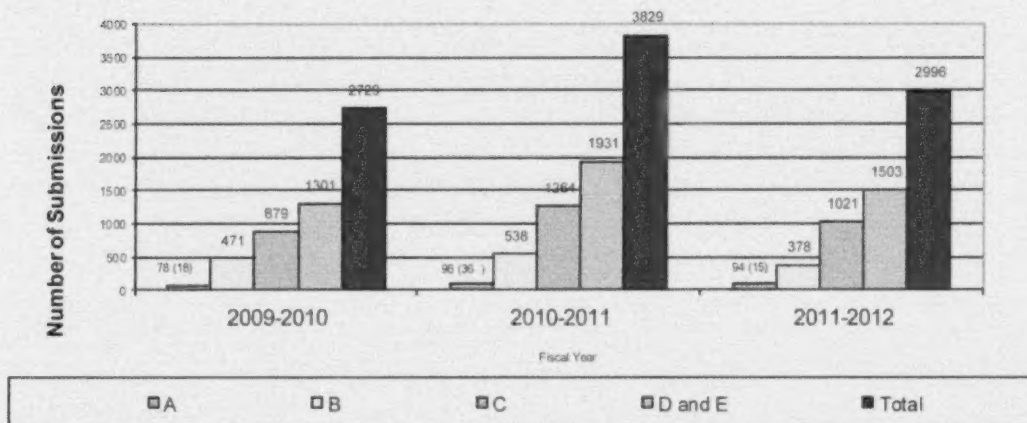
The PMRA is receiving \$13.2M for the Canada Food and Consumer Safety Action Plan for fiscal years 2008–2009 to 2012–2013. This plan encourages and facilitates industry quality assurance and stewardship programs for the safe manufacture, selection and use of consumer pesticide products. These funds are also being used to enhance targeted oversight by increasing compliance-enforcement capacity, which in turn will increase public confidence in pesticide product safety and increase rapid response to consumer product health and safety issues.

Appendices

Table 1. Product Submission Categories

Category A	Submissions to register new active ingredients and their companion end-use product(s); applications to add a major new use to a registered pesticide; submissions to establish a maximum residue limit for a previously non-assessed active ingredient; and submissions for user requested minor use registrations. Category A submissions require a full, supporting data package.
Category B	Submissions to amend a product label (for example, changes in application rates, timing of applications, new pests, changes to precautionary statements) or to change the product chemistry. Supporting data must be provided.
Category C	Submissions to register or amend a product label (add pest, use or change application rate) or change a formulation based on previously established precedents, or those that have reduced data requirements.
Category D	Submissions to register or amend products within particular programs such as the Import for Manufacture and Export, Own-Use Import, Grower Requested Own Use program, Master Copy, Private Label, User Requested Minor Use Label Expansion and renewal of registration.
Category E	Submissions for research authorizations and research notifications, when the research is carried out in Canada.

Figure 1. Trend in Number of Submissions Completed by the PMRA for the period of April 1, 2009 to March 31, 2012



Trends and Limitations:

- Represents 12 month periods
- Most category A and many category B submissions have >12 month timelines (therefore received in previous years)
- Number of category A and C submissions completed similar to previous two years
- Decrease in category D from previous year as a result of fewer applications for GROU import permits
- Decrease in category B submissions completed as a result of the completion of the category B work on hand project
- Number of submissions completed does not include presubmission consultations
- Number of Submissions Completed includes Registered, Withdrawn and Rejected
- For Category A the number in parentheses is the number of new active ingredients completed

Figure 2. Number of New Active Ingredients Registered

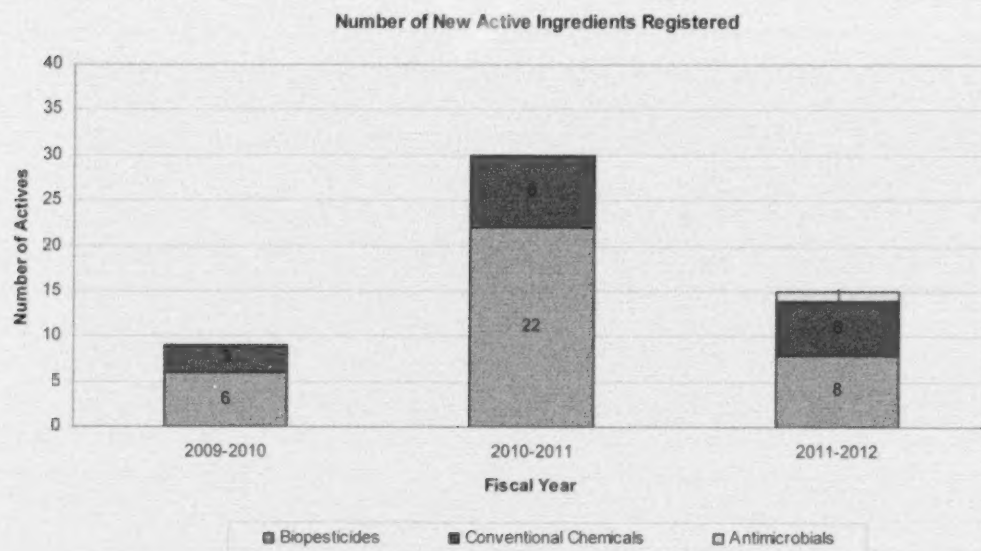
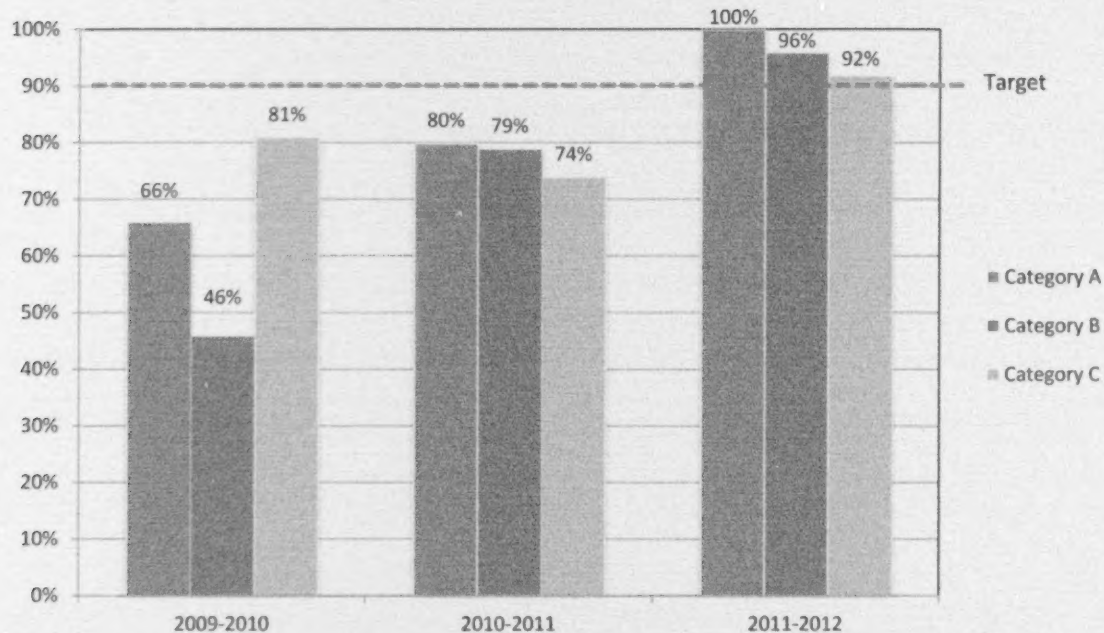


Figure 3. Performance Against Review Timelines



- Of the 92 category A submissions completed in 2010-2011, 2 of the submissions that did not meet the applicable review timeline did meet the proposed regulatory decision date.
- Out of the 508 Category B submissions completed in 2010-2011, there were 343 submissions (excluding emergency registration requests, PPIP, B.1.2, and Joint Reviews) with decision deadlines post January 1, 2010 and 328 met the applicable review timeline.
- Number of Submissions Completed includes Registered, Withdrawn and Rejected.

Table 2. Re-evaluation Activities as of 31 March 2012

Decisions on Older Pesticides as of 31 March 2012	Final¹ Decisions	Proposed² Decisions	Pending³ Publication	Total Decisions
Active ingredients addressed	343	35	5	383
Discontinued/withdrawn by registrant	106	0	0	106
Phase-out requested (or proposed for phase-out) as a result of PMRA review	12	0	1	13
Registration continued—label modifications	207	35	4	246
Registration continued—no label modifications	18	0	0	18

¹ The PMRA has finalized the re-evaluation decisions for these products (usually published in a Re-evaluation Decision or Re-evaluation Note) or registrants have indicated their intent to discontinue all products with that pesticide.

² The PMRA has published the proposed decisions (usually Proposed Re-evaluation Decisions).

³ Assessments have been completed and decisions proposed, but the PMRA has not yet published the proposed decisions.

Table 3. Approved GROU Products

Grower Requested Own Use (GROU) is an initiative put in place by the PMRA to make it easier for Canadian growers to access less-expensive, equivalent pest control products available in the United States. Representatives of key grower associations sit on the GROU Nomination Committee and choose appropriate products for the program with input from member organizations. Thanks to this mechanism, growers with an approved import certificate can legally obtain the American version of a Canadian-registered product.

In 2011–2012, 26 products were available under the GROU Program.

Velpar® L Herbicide (Pest Control Product #18197)
FirstRate Herbicide (Pest Control Product #26697)
Fruitone®N (Pest Control Product #14630) -
Oracle® Dicamba Agricultural Herbicide
Apollo SC Ovicidal Miticide (Pest Control Product #21035)
Agri-mek 1.9% EC Insecticide/Miticide (Pest Control Product #24551)
Force 3.0G Insecticide (Pest Control Product #23917)
Citation 75WG (Pest Control Product #24465)
Vangard 75WG (Pest Control Product #25509)
Pursuit 240 (Pest Control Product #23844)
Pursuit Herbicide (Pest Control Product #21537)
Dimilin 25% Insecticide (Pest Control Product #13816)
B-Nine WSG (Pest Control Product #17465)
Sumagic Plant Growth Regulator (Pest Control Product #25781)
Bonzi Plant Growth Regulator (Pest Control Product #25453)
Prowl 400 EC Herbicide (Pest Control Product #23439)
Nufarm MCPA Ester 600 Liquid Herbicide (Pest Control Product #27803)
Assure II Herbicide (Pest Control Product #25462)
Reglone Desiccant (Pest Control Product #26396)
Aatrex® Liquid 480 (Pest Control Product #18450)
Reflex Liquid Herbicide (Pest Control Product #24779) -
Roundup Weathermax® With Transorb 2 Technology Liquid Herbicide (Pest Control Product #27487)
Banvel II Herbicide (Pest Control Product #23957)
Basagran Liquid Herbicide (Pest Control Product #12221)
Elevate 50 WDG Fungicide (Pest Control Product #25900)
A-Rest Solution (Pest Control Product #16393)

Table 4. Active Ingredients Registered in 2011–2012

	Active Ingredient	End-Use Product (s)	Product Type	Registration Status	Product Category	Uses
1	<i>Bacillus firmus</i> Strain I-1582	Votivo 240 FS Nematicide	Nematicide	Full	Biopesticide	Seed treatment for corn and soybean
2	Copper Carbonate, Basic	MicroPro 200C-TS	Wood Preservative	Full	Antimicrobial	Treatment of wood products for above ground, ground contact and fresh water contact uses, e.g., lumber, timbers, landscape ties, fence boards, and posts, building poles and decks, docks, walkways, and wood shingles
3	Liquid Corn Gluten	Green It Liquid Bio-Herbicide Corn Gluten Weed Preventer Wilson Weedout Liquid Dandelion & Crabgrass Preventer	Herbicide	Full	Biopesticide	Lawns
4	<i>Cydia pomonella</i> Granulovirus (Strain M)	CYD-X	Insecticide	Conditional	Biopesticide	Apple trees
5	Fluopicolide	Fluopicolide 4 SC Fungicide Presidio Fungicide	Fungicide	Conditional	Conventional Chemical	Brassica (Head and Stem) Vegetables: Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Cavalo Broccolo, Chinese Broccoli, Chinese (napa) Cabbage, Chinese Mustard Cabbage, Kohlrabi Brassica Root Vegetables: radish, rutabaga, horseradish, turnip Cucurbit Vegetables: Acorn Squash; Balsam Apple; Balsam Pear; Bittermelon; Butternut Squash; Calabaza; Cantaloupe; Chinese Cucumber; Chinese Okra; Chinese Preserving Melon; Chinese Waxgourd; Citron Melon; Cucumber; Cucuzza; Gherkin; Gourd, Edible; Hechima; Hubbard Squash; Hyotan; Momordica spp; Muskmelon; Pumpkin; Spaghetti Squash; Summer Squash; Watermelon; Winter Squash Leafy Vegetables (Except Brassica Vegetables): Amaranth; Chinese Spinach; Cardoon; Chrysanthemum, Edible-leaved; Chrysanthemum, Garland; Dandelion; Endive, Escarole; Lettuce, Head and Leaf; Orach; Red Chicory; Rhubarb; Spinach; Spinach, New Zealand; Spinach, Vine; Swiss Chard Tomato, pepper, grapes, potato Outdoor Ornamentals (Field and Container Grown) Bedding Plants and Cut Flowers

	Active Ingredient	End-Use Product (s)	Product Type	Registration Status	Product Category	Uses
6	Icaridin	All-Family Insect Repellent Spray	Insect repellent	Full	Conventional Chemical	Human skin and clothing
		AVON SKIN-SO-SOFT SSS BUG GUARD PLUS Icaridin Insect Repellent Spray I				
		AVON SKIN-SO-SOFT SSS BUG GUARD PLUS Icaridin Insect Repellent Spray II				
		OFF! Active Insect Repellent Clean Feel				
		OFF! Deep Woods Pump Spray Insect Repellent Clean Feel				
		OFF! Family Care Clean Feel Insect Repellent Towelelettes				
7	Indaziflam	INDAZIFLAM 500 SC Herbicide	Herbicide	Full	Conventional Chemical	Apples, Pears, Peaches, Nectarines, Plums, Cherries (sweet/sour), Apricots, Grapes, Almonds, Hazelnuts, Filberts, Walnuts, Chestnuts, Japanese heartnuts in E. Canada and B.C. only
		INDAZIFLAM 200 SC Herbicide				
		ALION Herbicide				
8	Metofluthrin	OFF! Clip On Mosquito Repellent	Insect repellent	Conditional	Conventional Chemical	Area around humans
9	Oriental Mustard Seed Meal	MPT MUSTGRO(TM) CROP BIOFUMIGANT	Fungicide Nematicide	Full	Biopesticide	Strawberries Red Caneberries: blackberry, red and black raspberry, wild raspberry. Loganberry, cultivars and hybrids of these
10	<i>Paecilomyces fumosoroseus</i> Strain FE 9901	NOFLY™ WP	Insecticide	Conditional	Biopesticide	Greenhouse ornamental crops
11	Penflufen	EMESTO SILVER	Fungicide	Full	Conventional Chemical	Potato seed pieces
		Prosper EverGol				Canola, mustard (oilseed and condiment), rapeseed

	Active Ingredient	End-Use Product (s)	Product Type	Registration Status	Product Category	Uses
12	Penthiopyrad	Fontelis Fungicide	Fungicide	Full	Conventional Chemical	<p>Alfalfa,</p> <p>Berries, Low Growing Subgroup: Strawberry, Bearberry, bilberry, cloudberry, cranberry, lingonberry, partridgeberry, Low bush Blueberry,</p> <p>Bulb Vegetables (green, dry): Chive, fresh leaves; chive, Chinese, fresh leaves; daylily, bulb; elegans hosta; fritillaria, bulb; fritillaria, leaves; garlic, bulb; garlic, greatheaded, bulb; garlic, serpent, bulb; kurrat; lady's leek; leek; leek, wild; lily, bulb; onion, Beltsville bunching; onion, bulb; onion, Chinese, bulb; onion, fresh; onion, green; onion, macrostem; onion, pearl; onion, potato, bulb; onion, tree, tops; onion, Welsh, tops; shallot, bulb; shallot, fresh leaves; cultivars, varieties, and/or hybrids of these.</p> <p>Brassica (Cole) leafy vegetables: Broccoli; broccoli, Chinese (gailon); broccoli raab (rapini); Brussels sprouts; cabbage; cabbage, Chinese (bok choy); cabbage, Chinese (napa); cabbage, Chinese mustard (gai choy); cauliflower; cavalo broccolo; collards; kale; kohlrabi; mizuna; mustard greens; mustard spinach; rape greens; turnip greens</p> <p>Cucurbit vegetables: Chinese waxgourd (Chinese preserving melon); citron melon; cucumber (field + greenhouse); gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash, summer; squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon</p> <p>Fruiting vegetables: Eggplant; groundcherry (Physalis spp); pepino; Pepper (field + greenhouse) (includes bell pepper, chili pepper, cooking pepper, pimento, sweet pepper); tomatillo; tomato (field + greenhouse)</p> <p>Leafy vegetables: Amaranth (Chinese spinach); arugula (rocket); cardoon; celery; celery, Chinese; celtuce; chervil; chrysanthemum, edible-leaved; chrysanthemum, garland; corn salad; cress, garden; cress, upland; dandelion; dock (sorrel); endive (escarole); fennel, Florence; lettuce, head and leaf; orach; parsley; purslane, garden; purslane, winter; radicchio (red chicory); rhubarb; spinach; spinach, New Zealand; spinach, vine; Swiss chard</p>

Active Ingredient	End-Use Product (s)	Product Type	Registration Status	Product Category	Uses
					<p>Legume vegetables (succulent): jackbean, swordbean, soybean, immature pigeon pea</p> <p>Bean (Phaseolus): broad bean, succulent lima bean, green runner bean, snap bean, wax bean;</p> <p>Bean (Vigna): includes asparagus bean, blackeyed pea, Chinese longbean, cowpea, moth bean, southern pea, yardlong bean</p> <p>Pea (Pisum) includes dwarf pea, edible-podded pea, English pea, field pea, garden pea, green pea, snowpea, sugar snap pea;</p> <p>Pome fruits: Apple; crabapple; mayhaw; pear; pear, oriental; quince</p> <p>Root vegetables and leaves (except sugarbeet): beet, garden; burdock, edible; carrot; celeriac; chervil, turnip-rooted; chicory; ginseng; horseradish; parsley, turnip-rooted; parsnip; radish; radish, oriental; rutabaga; salsify; salsify, black; salsify, Spanish; skirret; turnip</p> <p>Stone fruits: Apricot; cherry, sweet; cherry, tart; nectarine; peach; plum; plum, Chickasaw; plum, Damson; plum, Japanese; plumcot; prune (fresh)</p> <p>Tree nuts: Almond; beech nut; butternut; chestnut; chinquapin; filbert (hazelnut); hickory nut; walnut, black and English; Peanuts</p>
	Vertisan Fungicide				<p>Canola,</p> <p>Dry Legumes (dry shelled beans and peas): chickpea (garbanzo); lentil; guar; lablab bean; [broad bean (dry); pigeon pea;]</p> <p>(Lupinus): grain lupin, sweet lupin, white lupin, white sweet lupin;</p> <p>(Phaseolus): field bean, kidney bean, [lima bean], navy bean, pinto bean, tepary bean,</p> <p>(Vigna): adzuki bean, [blackeyed pea], catjang, [cowpea], crowder pea, [moth bean], mung bean, rice bean, [southern pea], urd bean,</p> <p>(Pisum): [field pea]</p> <p>Small grains: Wheat, barley, triticale, oats, rye,</p> <p>Soybeans</p> <p>Corn, sorghum: corn, field; corn, sweet; [corn, seed]; popcorn, sorghum (milo), sorghum (sudangrass and hybrids),</p> <p>Sunflower,</p> <p>Tuberous and Corm Vegetables: Potato, sweet potato, Artichoke, Chinese; Artichoke, Jerusalem; Canna, edible; Chufa, Sugarbeet</p>

	Active Ingredient	End-Use Product (s)	Product Type	Registration Status	Product Category	Uses
		TREORIS Fungicide				Cucurbit vegetables: Chinese waxgourd (Chinese preserving melon); citron melon; cucumber; gherkin; gourd, edible (includes hyotan, cucuzza, hechima, Chinese okra); Momordica spp (includes balsam apple, balsam pear, bittermelon, Chinese cucumber); muskmelon (includes cantaloupe); pumpkin; squash, summer; squash, winter (includes butternut squash, calabaza, hubbard squash, acorn squash, spaghetti squash); watermelon Potatoes
		DPX-LEM17 50WG Fungicide				Turf grasses that are being grown for aesthetic or recreational purposes, in or around home lawns, residential dwellings, business and office complexes, shopping complexes, multi-family residential complexes, institutional buildings, airports, cemeteries, ornamental gardens, parks, playgrounds, schools, golf courses (tee box areas, roughs, fairways, greens, collars etc.), athletic fields, other landscaped areas, and commercial sod farms.
13	<i>Phoma macrostoma</i> Strain 94-44B	SCOTTS PHOMA P COMMERCIAL	Herbicide	Conditional	Biopesticide	Lawns Field grown nursery and landscape ornamentals and container ornamentals: Trees: Poplar, Black spruce, Pine; Perennial and annual ornamentals and groundcovers: Pot marigold, Salvia, Carolina Geranium, Snapdragon, Pansy, Coral Bells, Yarrow, Hydrangea, Blazing-star, Rhododendron x. PJM, Forsythia x. intermedia, Boxwood, Holly, Arborvitae (Thuja x.), Cotoneaster sal. Rep., Petunia (Petunia x hybrida), Marigold, Alyssum, Crimson Sage, Periwinkle; Forage grasses: Perennial ryegrass, Creeping red fescue, Tall fescue, Smooth brome grass, Meadow brome grass, Timothy grass
		Scotts Ecosense Weed-B-Gon Ready To Use Lawn Weed Control				Lawns
		Scotts Ecosense Weed-B-Gon Ready To Use Lawn Weed Control Herbicide				Lawns

	Active Ingredient	End-Use Product (s)	Product Type	Registration Status	Product Category	Uses
14	Extract of <i>Reynoutria sachalinensis</i>	Regalia Maxx Biofungicide Liquid Concentrate	Fungicide	Full	Biopesticide	Ornamental plants : annual and perennial flowering plants outdoor grown and greenhouse grown Wheat Crop Group 9 (Cucurbits), outdoor and greenhouse: Cantaloupe, Cucumber, Pumpkin, Zucchini, Watermelon, Melon, Muskmelon, and Squash Tomato (outdoor and greenhouse) Grapes, Strawberry
15	<i>Trichoderma asperellum</i> , Strain T34	T34 BIOCONTROL	Fungicide	Full	Biopesticide	Greenhouse ornamentals

Table 5. Re-evaluation Decisions in 2011–2012

No	Active Ingredient	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, PRVD, RVD or REV note)
1	Amitraz	REV2011-04	Update: The PMRA is requiring changes to labels of domestic class products to enhance the safety of companion animals. Due to the need for additional toxicology data, the implementation of these label improvements is considered a first step in the re-evaluation process for amitraz.
2	Atrazine	Section 12 data reviewed	Update January 2012: Review of environmental data, required under Section 12 of the PCPA, confirmed that the use of atrazine is acceptable for continued registration. As a result, no further mitigation measures are required at this time.
3	1-bromo-3-chloro-5,5-dimethylhydantoin	RVD2011-08	Final Decision: Acceptable for continued registration. Mitigation measures include new/revised label amendments (including PPE, additional advisory and hazard statements).
4	1,3-dichloro-5-ethyl-5-methylhydantoin	RVD2011-08	Final Decision: Acceptable for continued registration. Mitigation measures include new/revised label amendments (including PPE, additional advisory and hazard statements).
5	Chlorothalonil	PRVD2011-14	Proposed Decision: The PMRA is proposing continued registration with the implementation of mitigation measures. Proposed mitigation includes new/revised label statements to further protect human health and the environment (including PPE, REIs, changes to maximum application rate or number of yearly applications, revised toxicology and environmental statements, aquatic buffer zones and other label statements).
6	Triclosan	EC/HC Joint Preliminary Assessment Triclosan Published: 31/03/2012	Preliminary assessment: Environment Canada and Health Canada released a joint preliminary assessment report on triclosan. Proposed conclusions under the PCPA: The PMRA is proposing that the use of pest control products containing triclosan for material preservative use in manufacture of textiles, leather, paper, plastics and rubber in Canada do not pose an unacceptable risk to human health. While use of these products may contribute to environmental exposure, pest control products are not expected to contribute significantly to the risks to aquatic organisms identified in the preliminary assessment. In addition, the current registrant of triclosan has chosen not to maintain registration under the PCPA. Also see "Triclosan – Questions and Answers" (http://www.chemicalsubstanceschimiques.gc.ca/fact-fait/triclosan-eng.php). Expiry date of last registered product: 31/12/2014
7	Copper Naphthenate	RVD2011-07	Final Decision: Acceptable for continued registration. Mitigation measures include new/revised label statements to further protect human health and the environment (including PPE, removal of domestic fabric treatment uses, additional advisory and hazard statements and other label statements).
8	Zinc Naphthenate	RVD2011-07	Final Decision: Acceptable for continued registration. Mitigation measures include new/revised label statements to further protect human health and the environment (including PPE, removal of domestic fabric treatment uses, additional advisory and hazard statements and other label statements).

No	Active Ingredient	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, PRVD, RVD or REV note)
9	Copper-8-quinolinolate	RVD2011-09	<p>Final Decision: Based on residential exposure from commercial use of copper 8-quinolinolate as an antiseptant, continued registration is acceptable. Since the publication of the PRVD, the registrant has voluntarily discontinued all remedial/joinery wood preservative uses.</p> <p>Expiry date of last registered product (Reg. No. 15314): 30/03/2011</p> <p>Note: The occupational and ecological exposure from commercial use of copper 8-quinolinolate as an antiseptant, are being addressed under a separate initiative within the PMRA and are not part of this re-evaluation decision.</p>
10	Denatonium benzoate	PRVD2011-15	<p>Proposed Decision: The PMRA is proposing continued registration with the implementation of mitigation measures. Proposed mitigation measures include new/revised label statements to further protect human health and the environment (including specification of outdoor use only, standardized statements for PPE and REIs, and additional advisory statements).</p>
11	Diclofop-methyl	RVD2011-12	<p>Final Decision: Acceptable for continued registration. Mitigation measures include new/revised label statements to further protect workers and the environment (including PPE, REI, terrestrial and aquatic buffer zones and other label statements).</p> <p>Note: All uses of diclofop-methyl have been voluntarily discontinued by the registrant.</p> <p>Expiry date of last registered product: 31/12/2014</p>
12	Dodemorph-acetate	RVD2011-11	<p>Final Decision: Acceptable for continued registration for use on mini potted roses and garden type roses only. Mitigation measures include new/revised label statements to further protect workers and the environment (including specifying not for use on cut flower roses, REI, a maximum of one application per crop cycle, reduced maximum spray volume, additional advisory label statements, and buffer zones). The re-evaluation decision has been recently revised to allow the use on garden type roses in addition to mini-potted roses. The registrant will be communicating these new changes to the users.</p>
13	Ethalfuralin	PRVD2011-16	<p>Proposed Decision: The PMRA is proposing continued registration with the implementation of mitigation measures. Proposed mitigation includes new/revised label statements to further protect human health and the environment (including PPE, REI, revised hazard and environmental statements, aquatic and terrestrial buffer zones, addition of use instructions for ethalfuralin blended fertilizers and other label statements).</p>
14	Formaldehyde	RVD2011-10	<p>Final Decision: Acceptable for continued registration. Mitigation measures include new/revised label statements to further protect workers and the environment (including removal of certain uses, revised PPE, reduced maximum application rates, certification requirement for fumigation application, additional precautionary statements and other label statements).</p>

No	Active Ingredient	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, PRVD, RVD or REV note)
15	Paraformaldehyde	RVD2011-10	Final Decision: Acceptable for continued registration. Mitigation measures include new/revised label statements to further protect workers and the environment (including removal of certain uses, revised PPE, reduced maximum application rates, certification requirement for fumigation application, additional precautionary statements and other label statements).
16	Maleic Hydrazide	Section 12 data reviewed	Update 30 March 2012: Review of submitted environmental data, required under Section 12 of the PCPA, confirmed that the use of maleic hydrazide is acceptable for continued registration. As a result, updated standard statements will be added to labels.
17	Poly[oxyethylene(dimethyliminio)ethylene(dimethyliminio)ethylene Dichloride] (POD)	PRVD2011-13	Final Decision: Acceptable for continued registration. Mitigation measures include new/revised label amendments to further protect workers and the environment (including PPE, good hygiene practices in occupational settings, improvements to advisory label statements, a prohibition of use in decorative fountains with fish.).
18	Propiconazole	RVD2012-02	Final Decision: Acceptable for continued registration. Proposed mitigation includes new/revised label statements (including PPE, REIs, prohibition of high pressure sprayers for remedial wood preservative uses, discontinuation of domestic remedial wood preservative product, buffer zones, and additional advisory statements). Expiry date of last domestic product: 31/12/2013
19	Ethofumesate	Section 12 data reviewed	Update 30 March 2012: Review of environmental data, required under Section 12 of the PCPA, confirmed that the use of Ethofumesate is acceptable for continued registration. As a result, buffer zones will be revised on certain labels.
20	Ammoniacal Copper Zinc Arsenate (ACZA)	RVD2011-06	Final Decision: Acceptable for continued registration. New risk mitigation measures include revisions to first aid and precautionary statements, PPE, direction for use, as well as additional environmental hazard statements. Additionally, all operational procedures within treatment plants will be required to be consistent with the Environment Canada document: Recommendations for the Design and Operations of Wood Preservation Facilities – Technical Recommendations. The use limitations section of product labels will be amended and the PMRA is also requiring the development of a risk management plan, in conjunction with Canadian stakeholders, to further lower potential risks for those working with these products in wood-treatment facilities.
21	Chromated Copper Arsenate (CCA)	RVD2011-06	Final Decision: Acceptable for continued registration. New risk mitigation measures include revisions to first aid and precautionary statements, PPE, direction for use, as well as additional environmental hazard statements. Additionally, all operational procedures within treatment plants will be required to be consistent with the Environment Canada document: Recommendations for the Design and Operations of Wood Preservation Facilities – Technical Recommendations. The use limitations section of product labels will be amended and the PMRA is also requiring the development of a risk management plan, in conjunction with Canadian stakeholders, to further lower potential risks for those working with these products in wood-treatment facilities.

No	Active Ingredient	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, PRVD, RVD or REV note)
22	Creosote	RVD2011-06	Final Decision: Acceptable for continued registration. New risk mitigation measures include revisions to first aid and precautionary statements, PPE, direction for use, as well as additional environmental hazard statements. Additionally, all operational procedures within treatment plants will be required to be consistent with the Environment Canada document: Recommendations for the Design and Operations of Wood Preservation Facilities – Technical Recommendations. The use limitations section of product labels will be amended and the PMRA is also requiring the development of a risk management plan, in conjunction with Canadian stakeholders, to further lower potential risks for those working with these products in wood-treatment facilities.
23	Pentachlorophenol	RVD2011-06	Final Decision: Acceptable for continued registration. New risk mitigation measures include revisions to first aid and precautionary statements, PPE, direction for use, as well as additional environmental hazard statements. Additionally, all operational procedures within treatment plants will be required to be consistent with the Environment Canada document: Recommendations for the Design and Operations of Wood Preservation Facilities – Technical Recommendations. The use limitations section of product labels will be amended and the PMRA is also requiring the development of a risk management plan, in conjunction with Canadian stakeholders, to further lower potential risks for those working with these products in wood-treatment facilities.
24	Clopyralid	RVD2011-05	Final Decision: Acceptable for continued registration. Mitigation measures include new/revised label statements to further protect workers and the environment (including PPE, REI, terrestrial buffer zones and other label statements).
25	Dimethoate	PRVD2011-12	Proposed Decision: The PMRA is proposing continued registration for certain uses of dimethoate with the implementation of mitigation measures. Proposed mitigation to include new/revised label amendments to further protect human health and the environment. These include: additional PPE, engineering controls, restrictions on amount of active handled per day and on the number of applications, increased application intervals and pre-harvest intervals, reduction of maximum rates, REIs, precautionary statements, buffer zones for non-target aquatic habitats, as well as statements to avoid drift to areas of human habitation). Other uses of dimethoate are being proposed for phase out. These uses are: application on Douglas fir seed trees, Sitka spruce and spruce (woodland), application to structural sites, paint-on treatments to birch, roses and lilac, application with right-of-way sprayer and soil drench application to carnation
26	Fluazifop-p-butyl	PRVD2011-11	Proposed Decision: The PMRA is proposing continued registration with the implementation of mitigation measures. Proposed mitigation includes new/revised label statements to further protect workers and the environment. These include: improvements to PPE and additional instructions concerning good hygiene practices, prohibition of fluazifop-P-butyl in greenhouses, a 12-hour REI, hazard label statements regarding the sensitization potential, hazard statements for risks to aquatic species, advisory statements to reduce potential surface and groundwater contamination as well as buffer zones to protect non-target aquatic and terrestrial habitats.

No	Active Ingredient	Regulatory Publications	Summary of Decision or Proposed Decision (as contained in PACR, PRVD, RVD or REV note)
27	Diclofop-methyl	PRVD2011-10	<p>Proposed Decision</p> <p>The PMRA is proposing continued registration with the implementation of mitigation measures. Proposed mitigation includes new/revised label statements to further protect workers and the environment. These include: revised toxicology and environmental statements, additional PPE for handlers, closed mixing/loading systems, enclosed-cab application equipment, maximum-permitted amount handled per day, REI, terrestrial and aquatic buffer zones, as well as environmental hazards statements.</p>
28	Sethoxydim	Section 12 data reviewed	<p>Update September 2011:</p> <p>Review of environmental data, required under Section 12 of the PCPA, confirmed that the use of sethoxydim is acceptable for continued registration. As a result, revised buffer zones and updated standard statements will be added to labels</p>
29	Metalaxyl	Section 12 data reviewed	<p>Update September 2011:</p> <p>Review of environmental data, required under Section 12 of the PCPA, confirmed that the use of metalaxyl and metalaxyl-m is acceptable for continued registration. As a result, revised buffer zones and updated standard statements will be added to certain labels.</p>
30	Metalaxyl-M	Section 12 data reviewed	<p>Update September 2011:</p> <p>Review of environmental data, required under Section 12 of the PCPA, confirmed that the use of metalaxyl and metalaxyl-m is acceptable for continued registration. As a result, revised buffer zones and updated standard statements will be added to certain labels.</p>